

SAEGIL ENGINEERING & CONSULTING CO., LTD.



SLOPE



CIVIL WORKS



ROAD



UNDERGROUND FACILITIES



EXCAVATION



**URBAN
PLANNING**



BRIDGE



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INTRODUCTION

SAEGIL Engineering & Consulting Co., Ltd. (SAEGIL E&C) since 1991 has grown steadily on the strength of innovative technological development over the past twenty five years. It has emerged globally as one of the leading engineering and consulting firms in the fields of deep excavation, soil nailing, anchored retaining walls, sea-dikes and land-slide control works.

The core of our company culture is "Innovative Specialists". Our engineering experience has covered virtually all fields of civil engineering service but our past experience and efforts have been mainly concentrated on Geotechnical & Structure Engineering service such as deep excavation supporting system design, site investigation, underground passageway, common utility tunnel, bridge, and etc.

INTRODUCTION

SAEGIL Engineering & Consulting Co., Ltd 's impressive reputation as an excellent engineering firm is well demonstrated by the fact that it is carrying out numerous projects in Korea and Overseas as follows.

- Togok Samsung Project (Excavation depth(D):45m, Area(A):80,000 m²)
- United States Embassy Seoul, Korea Project (D:18.4m, A:8,288 m²)
- Chinese Embassy Seoul, Korea Project (D:13.9m, A:3,471 m²)
- Seo-Cho S-Project (D:35.8m, A:11,353 m²)
- Korea National Archives Project (D:26.0m, A:17,053 m²)
- Angola Three Tower Project (D:16.80m, A:10,436 m²)
- Algeria C.P.E & I.A.P Project (A:40,171 m²)
- Sri-Lanka Housing Project (D:9.76m, A:3,678 m²)
- Haeundae tourist resort development project (D:31.12m, A:197,534m²)
- New Seoul City Hall project (D:26.35m, A:7,805m²)
- Hanoi City Complex Project (D:23.56m, A:13,249m²)
- North An-Khanh New city project 1st phase (D:0.5~8.0m, A:80,068m²)
- Waterfront Integrated Resort Project in Sri-Lanka (D:0.97~17.29m, A:32,913m²)
- Asia Royal Hospital AR3 Project in Myanmar (D:1.2~6.0m, A:1,660m²)

SAEGIL Engineering & Consulting Co., Ltd has successfully worked in a wide range of projects in every phase of the engineering cycle including project development, feasibility studies, consulting, basic and detailed engineering, construction supervision and measurement, etc. As the frontier of this new millennium, SAEGIL E&C would like to reconfirm its uncompromising commitment for customer satisfaction and to meet the challenges with a view to make our globe a better place to live in through continuous R&D.

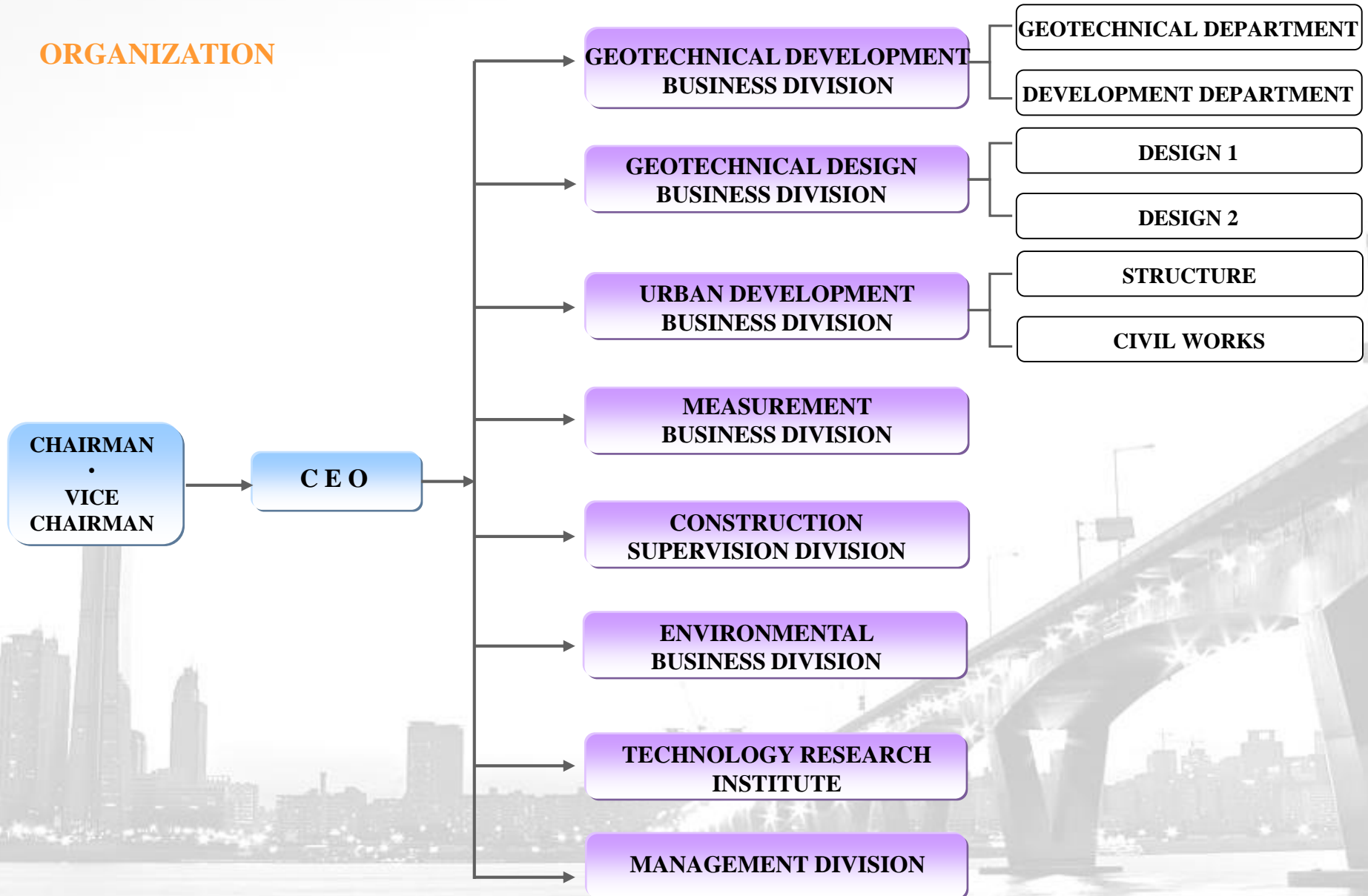
HISTORY

- 1991. 06.** Establishes Company (Saegil Engineering Co., Ltd)
- 09.** Registers Business (Engineering Service)
- 1992. 02.** Registers Construction Supervision Service (Civil Engineering Construction)
- 07.** Establishes Research Institute
- 09.** Registers Membership in Korea Geotechnical Society
- 1993. 04.** Registers Membership in Korea Engineering & Consulting Association
- 05.** Registers Membership in Korean Association of Surveying & Mapping
- 07.** Registers Membership in Korean Engineering Service Association (Geotechnical, Structural, Road & Airport, Water Resource Development and Urban Planning)
- 1994. 03.** Registers Membership in Korean Engineering Service Association (Transportation)
- 10.** Registers Membership in Korean Engineering Service Association (Water Supply & Sewerage)
- 1995. 01.** Registers Membership in Korean Engineering Service Association (Landscape Architecture)
- 06.** Registers Membership in Korean Engineering Service Association (Agriculture & Fishery)
- 1996. 12.** Designated as a Research Institute for Exemption from Military Service
- 1998. 08.** Registers Public Survey Industry Service
- 1999. 01.** Registers Membership in Korean Engineering Service Association (Water Quality Management, Waste Disposal)
- 06.** Registers Membership in Korean Engineering Service Association (Harbor & Coast)
- 11.** Acquires ISO9001
- 2001. 04.** Registers Construction Supervision Service (General)

HISTORY

- 2001. 12.** Registers Membership in Korean Engineering Service Association (Atmospheric Management)
- 2002. 04.** Registers Membership in Korean Engineering Service Association (Construction Safety Management)
- 05.** Registers a Specialized Safety Diagnosis Agency (Bridges and Tunnels)
- 2003. 04.** Change Company Name into Saegil E&C (Saegil Engineering & Consulting Co., Ltd)
- 2007. 02.** Registers International Contractor (Construction Engineering)
- 03.** Registers Membership in Korean Engineering Service Association (Noise and Vibration)
- 2012. 03.** Registers Membership in Korean Engineering Service Association (Natural Soil Environment)
- 2014. 07.** Establishment of Overseas Subsidiary Branch (Sri Lanka)
SAEGIL E&C LANKA LIMITED
- 12.** Registers Construction Engineering Service (Design and Construction Project Management)
- 2015. 08.** Registers Membership in Korean Engineering Service Association (Railway)
- 2017. 08.** Relocation of Office to Songpa Terra Tower 2
- 2018. 01.** Registers Specialized Agency for Underground Safety Impact Assessment
- 2021. 11.** Registers DesignVE Specialist of Public Procurement Service
- 2023. 05.** Acquires ISO45001
- 08.** Relocation of Headquarters to Seoul

ORGANIZATION



MAJOR WORK FIELD

- Deep Excavation & Support Systems
- Foundation / Ground Improvement
- Site Planning & Development
- Tunnels & Underground Facilities
- Urban Building, Tunnel, Subway
- Computerized Management Systems
- Computer Aided Design & Engineering
- Measurement Automation system
- Municipal Water & Sewage Treatment
- Industrial Wastewater Treatment
- Solid Waste Management
- Environmental Impact Assessment
- Road, Bridge, Airports
- Ports & Offshore Structures
- Dam, Sea-Dike and Water Resources
- Software Development



Urban planning



Deep Excavation



Slope



Civil works



Road



Measurement

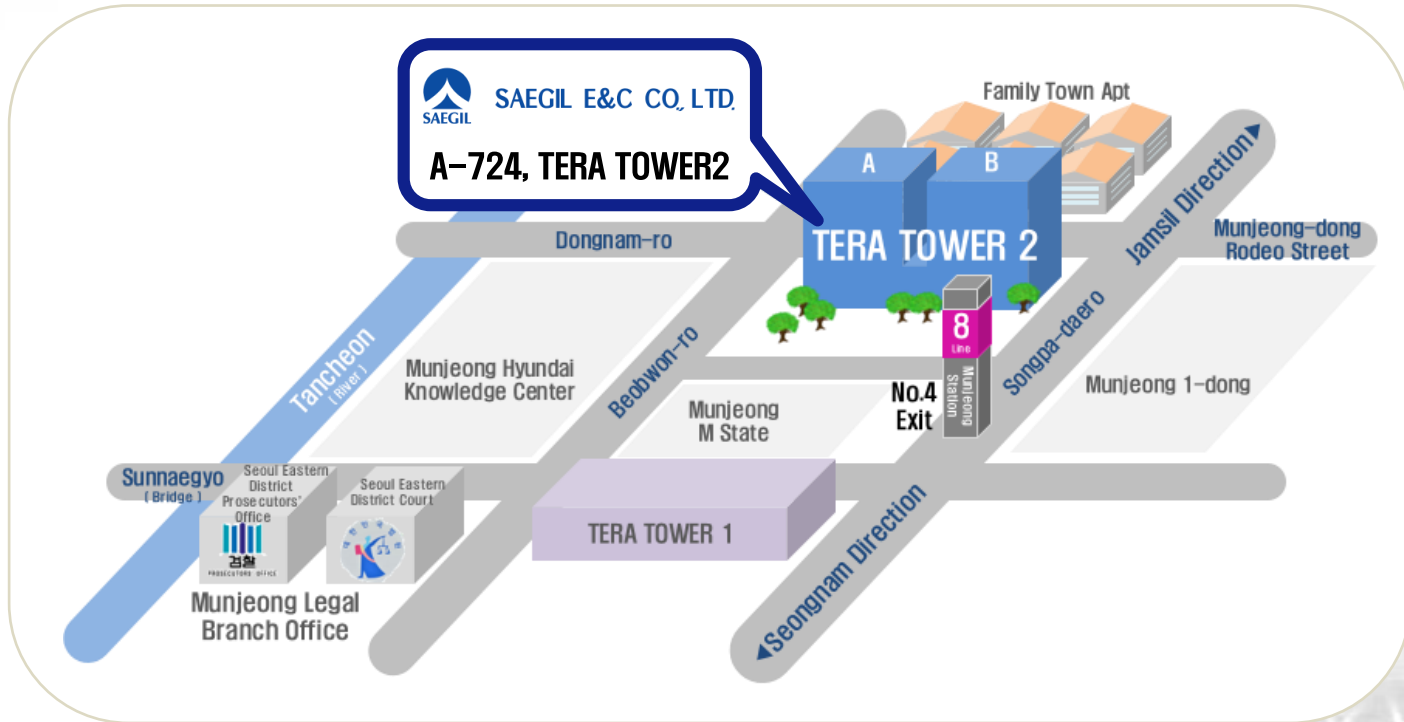


Bridge



Underground Facilities

LOCATION



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- **FACSIMILE** : 82-2-418-0904
- **HOME PAGE** : <http://www.saegil.co.kr>

KOREA

OVERSEAS

KOREA

DESIGN

Duration	Project	Excavation Depth (m)	Area (m ²)
1998~2000	Do-Gok Samsung Project	45	80,000
2001	Chinese Embassy Seoul, Korea Project	13.9	3,471
2002	Seo-Cho S-Project	35.3	11,353
2003	United States Embassy Seoul, Korea Project	18.4	8,288
2003	Yong-San Station Project	29.8	23,790
2004	Samsung Seoul Hospital Project	34.9	13,154
2004	Kyunggi Province Seorim spa Project	11.8	10,316
2005	Yong-pyong 4th Condo Project	31.8	7,703
2006	Kangwon Land Casino Extension Project	9.2	6,791
2007	Sangamdong(DMC) Woori Bank Project	27.87	7,829
2008	Dongdaemun World Design Park & Complex Project	14.44	48,936
2008	New Seoul City Hall Project	26.35	7,805
2009	A Block project of Songdo science village streetmall in Incheon	13.0	38,521
2010	Haeundae tourist resort development Project	31.12	197,534
2011	Hallyuworld zone 1 (5,6 BL) project in Goyang Tourist & Cultural Complex	20.30~30.45	56,447
2012	City tower project in Chungna, Incheon	10.45~26.25	28,896
2013	Samsung Changwon Hospital Project	7.58~35.21	7,700
2014	Samsung Seoul Hospital Future Medical Building Project	20.3~30.6	6,037
2014	Magok Home & Shoping Project	20.7~26.0	4,940

KOREA

OVERSEAS

KOREA

DESIGN

Duration	Project	Excavation Depth (m)	Area (m ²)
2015	UNIST(Ulsan National Institute of Science and Technology) Project	1.00~10.90	30,511
2016	National Aviation Museum of Korea Project	2.90~7.80	10,727
2016	BIFC(Busan International Finance Center) Project	18.81~24.71	10,780
2016	Gangbuk Samsung Hospital Project	1.00~26.20	5,950
2016	Pyeongtaek Adidas Logistics Center Project	-	22,284
2017	Korea University SK Future Hall Project	5.16~21.94	7,003
2017	Hyungji Global Fashion Complex Center Project	6.00~6.50	12,501
2017	Samsung Electronics Pyeongtaek ESSbuilding Project	0.70~1.40	1,851
2017	Gyeongpo Olympic Count Project	4.50~27.30	11,127
2018	Samsung Electronics Pyeongtaek Logistics Center Project	7.00	71,415
2019	Pearl Abyss headquarters building Project	20.36~27.59	6,282
2020	Sk siltron welfare building Project	1.06~3.86	4,734
2020	PNPSECURE Magok Building Project	16.26	3,969
2020	Daejeon Expo Science Complex Project	15.76~26.36	40,834
2021	Gangneung The Ocean 259 Project	~7.46	57,302
2022	KOREA SUPERFREEZE Busan Premium Cold Chain Logistics Center Project	~15.75	26,309
2022	Yonsei University Pharmaceutical Bio Commercialization Center Project	1.00~8.56	8,648
2022	Hanwha Life Insurance Daegu building Project	2.45	1,332
2023	Samcheok Medical Center Project	7.11~9.96	13,311

KOREA

OVERSEAS

KOREA

FIELD MEASUREMENT

Duration	Project	Excavation Depth (m)	Area (m ²)
2000~2002	Seocho C-Block New Construction	32.90~35.80	19,364.00
2003	Mapo HYUDAI HYEL Project	20.00~30.00	14,274.00
2004	Busan Oncheon-dong A-STAR Project	13.60~21.70	9,987.07
2004	Jeju University Hospital Project	10.00~20.00	27,264.00
2005	Shinsagae Department Store in Jukjeon	26.00~32.00	20,123.04
2005	Sindorim TECHNOMART Project	22.49~32.37	23,288.00
2006	Pyeongtaek civil station building Project	0.75~25.50	5,331.21
2006	NC soft R&D center Project	31.41~34.81	2,092.19
2007	Y22 Park.1 Project	20.50~36.40	4,646.50
2008	Busan Centum Science Park Project	28.00~34.00	9,900.00
2009	Goyang Central Bus Terminal Project	23.30~30.00	27,055.00
2010	Pankyo Techno Valley global R&D Center	11.64~22.00	9,924.76
2010	Honam High-speed Railroad Construction, Lot No.3-2	15.00~23.00	30,265.00
2011	Proton Center Extension Work in Samsung Medical Center	18.30~26.70	3,323.62
2012	Hwajeong Jugong Apt Reconstruction Project in Gwangju	15.00~20.00	156,312.00
2012	Gwanghwamun D Tower New Construction	27.19~31.00	8,910.43
2013	Gwangmyeong IKEA New Construction	13.61~18.00	28,891.96
2013	Underground public Pedestrian Facility Project in Gwanghwamun Station Connection	4.40~22.78	2,875.50
2014	New town 1-3 area Construction in Bugahyeon-dong	16.00~31.00	247,668.00

KOREA

OVERSEAS

KOREA

FIELD MEASUREMENT

Duration	Project	Excavation Depth (m)	Area (m ²)
2015	Songdo Korean American Town Project	G.L(-)12.70~(-)14.40	23,588
2015	Samsung Life Insurance Cheongdam-dong Building Project	F.H(+)+3.04~(-)9.76	4,427
2016	Wirye New Town E-Mart Project	E.L(+)+3.09~(+)+8.99	16,820
2016	Yeouido Parc One Project	-	46,465
2017	Goyang Logistics Park Project	E.L(+)+12.44~(+)+20.64	56,359
2018	KT Yongsan Data Center Project	-	10,702
2018	Seomyeon IPARK Project	-	83,092
2018	Kookmin Bank Nowon Branch Project	H=27.21~24.21	1,368
2019	Pyeongtaek Station SK VIEW Project	-	73,997
2020	Gangbuk Samsung Hospital Project	G.L(-)-3.87~(-)10.87	4,492
2020	Teachers Pension Seoul Hall Project	G.L(-)-28.97~(-)33.08	8,243
2021	Ulsan Taehwa River IPARK Officetel Project	G.L(-)-14.53~(-)20.70	2,724
2021	Musinsa P1 Project	H=17.74	1,343
2021	Pyeongtaek Jije Station Xi Project	G.L(-)-8.90	-
2021	Gunsan Lake Park IPARK Project	E.L(+)+8.40~(+)+36.00	42,050
2022	Dalseo Prugio Signature Project	31.80	17,212
2022	Singil 6-dong Community Service Center Project	E.L(+)+10.74	-
2023	Housing Redevelopment Project in Hwachang District, Anyang	E.L(+)+14.80~(+)+22.15	13,944

KOREA

OVERSEAS

OVERSEAS

DESIGN

Duration	Project	Excavation Depth (m)	Area (m²)	Remark
2004~2005	Sonangol Three Tower Project	15.0	7,174	Angola
2005	ESSA Compound Project	-	107,259	Angola
2005	Conference Center Project	8.0	2,128	Angola
2005	Shopping Angola Project	-	13,090	Angola
2005~2006	Atyrau Reiviera Housing Project	-	152,556	Kazakhstan
2006	C.P.E & I.A.P Project	-	40,171	Algeria
2006~2007	Sri-Lanka Housing Project	9.76	3,678	Sri-Lanka
2006~2008	Hanoi City Complex Project	23.56	13,249	Vietnam
2007~2008	Luanda & Houston Tower Project	24.34	859	Angola
2007~2008	Express Residential Complex Project	18.7	42,998	Kazakhstan
2007~2008	Mega Residence Project	17.8	245,852	Kazakhstan
2008~2009	Habico Tower Project	24.34	859	Vietnam
2008~2011	North An-Khanh New city project 1st phase	18.7	42,998	Vietnam
2009~2012	BIDV Diamond Tower Project	20.5~22.6	3,065	Vietnam
2013~2014	Embassy of The Republic of KOREA	1.47~4.46	3,165	Qatar
2012~2014	Waterfront Integrated Resort Project	0.97~17.29	32,913	Sri-Lanka
2014~2015	Asia Royal Hospital AR3 Project	0.5~6.0	1,660	Myanmar

KOREA

OVERSEAS

OVERSEAS

CONSULTING

Duration	Project	Consulting Period	Remark
2009	Habico Tower Project	9 Month	Vietnam
2014 ~	Waterfront Integrated Resort Project	In Progress	Sri-Lanka

MEASUREMENT

Duration	Project	Consulting Period	Remark
2014 ~	Waterfront Integrated Resort Project	In Progress	Sri-Lanka

OVERSEAS DESIGN



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LUANDA & HOUSTON TOWER PROJECT
STADIUM PROJECT

SRI-LANKA

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WATERFRONT INTERATED RESORT PROJECT

ALGERIA

C.P.E & I.A.P PROJECT

KAZAKHSTAN

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MEGA RESIDENCE PROJECT

AZERBAIJAN

BAKU HOUSING COMPLEX(SKY PARK) PROJECT



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MYANMAR

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QATAR

EMBASSY OF THE REPUBLIC OF KOREA

SAUDI ARABIA

THE KING ABDULLAH MEDICAL CITY PROJECT

SIERRA LEONE

FREETOWN CITY ADMINISTRATIVE COMPLEX
PROJECT





ANGOLA





THREE TOWER PROJECT

PROJECT SUMMARY

PROGRAM MIXED USE TYPE
(OFFICE/APARTMENT/RETAIL)
LOCATION LUANDA, ANGOLA
SITE AREA 14,453m²
FLOORS B2 / F20
DESIGN YEAR 2004~2005

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS

DESIGN SUMMARY

SCOPE ① PILE FOUNDATION DESIGN
SCOPE ② TEMPORARY EARTH RETAINING WALL
& LATERAL SUPPORT DESIGN
③ CIVIL WORKS DESIGN

EXCAVATION DEPTH 15.0m
EXCAVATION AREA 7,175m²



ESSA COMPOUND PROJECT

PROJECT SUMMARY

PROGRAM	EDUCATIONAL FACILITIES
LOCATION	LUANDA, ANGOLA
SITE AREA	107,259m ²
ARCHITECT	SPACE GROUP
DESIGN YEAR	2005

DESIGN SUMMARY

- SCOPE**
- ① MASTER PLAN DESIGN
 - ② CIVIL WORKS DESIGN

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS



CONFERENCE CENTER PROJECT

PROJECT SUMMARY

LOCATION	LUANDA, ANGOLA
SITE AREA	14,453m ²
BUILDING SIZE	B2 / F2
ARCHITECT	SPACE GROUP
DESIGN YEAR	2005

DESIGN SUMMARY

- SCOPE**
- ① TEMPORARY EARTH RETAINING WALL & LATERAL SUPPORT DESIGN
 - ② CIVIL WORKS DESIGN

EXCAVATION DEPTH 8.0m

EXCAVATION AREA 2,128m²

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS



TOTAL APARTMENT PROJECT

PROJECT SUMMARY

PROGRAM MIXED USE TYPE
LOCATION LUANDA, ANGOLA
SITE AREA 2,330m²
FLOORS B4 / F13
DESIGN YEAR 2006~2007
ARCHITECT SPACE GROUP

DESIGN SUMMARY

SCOPE ① CIVIL WORKS DESIGN
 ② EXCAVATION DESIGN

DESIGN PROGRESS STAGE

① SCHEMATIC DESIGN
 ② DESIGN DEVELOPMENT
 ③ CONSTRUCTION DOCUMENTS

SERVICED RESIDENCE -2 PROJECT

PROJECT SUMMARY

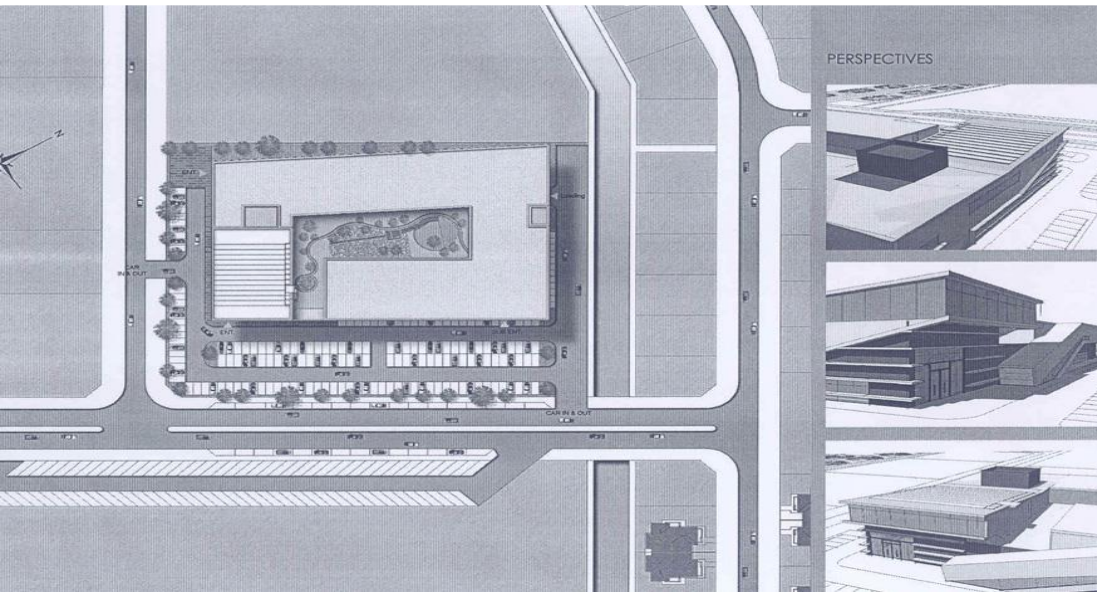
PROGRAM MIXED USE TYPE
LOCATION LUANDA, ANGOLA
SITE AREA 1,530m²
FLOORS B1 / F20
DESIGN YEAR 2006~2007
ARCHITECT SPACE GROUP

DESIGN SUMMARY

SCOPE ① CIVIL WORKS DESIGN
 ② EXCAVATION DESIGN

DESIGN PROGRESS STAGE

① SCHEMATIC DESIGN
 ② DESIGN DEVELOPMENT
 ③ CONSTRUCTION DOCUMENTS



VIANA SHOPPING CENTER PROJECT

PROJECT SUMMARY

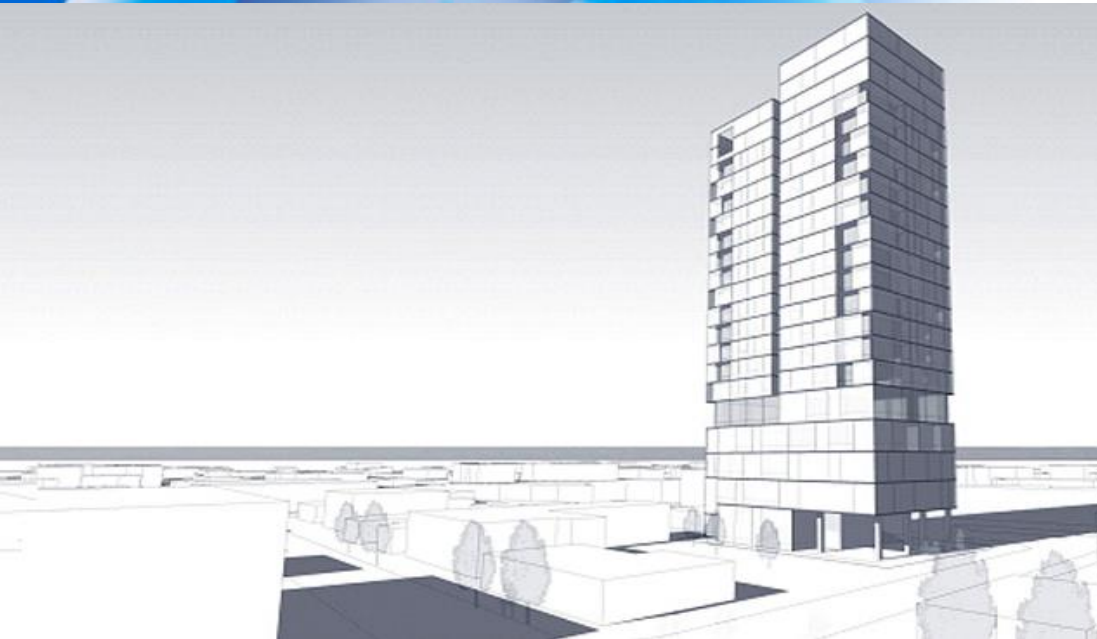
PROGRAM	SHOPPING CENTER
LOCATION	LUANDA, ANGOLA
SITE AREA	13,090m ²
BUILDING SIZE	F3
ARCHITECT	SPACE GROUP
DESIGN YEAR	2005

DESIGN SUMMARY

- SCOPE**
- ① CIVIL WORKS DESIGN
 - ② EXCAVATION DESIGN

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS



LUANDA & HOUSTON TOWER PROJECT

PROJECT SUMMARY

PROGRAM	MIXED USE TYPE
LOCATION	LUANDA, ANGOLA
SITE AREA	899.51m ²
BUILDING SIZE	B3 / F17
ARCHITECT	SPACE GROUP
DESIGN YEAR	2007~2008

DESIGN SUMMARY

- SCOPE**
- ① CIVIL WORKS DESIGN
 - ② EXCAVATION DESIGN

EXCAVATION DEPTH 22.5~23.5m

EXCAVATION AREA 858.7m²

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS



STADIUM PROJECT

PROJECT SUMMARY

PROGRAM	STADIUM
LOCATION	LUANDA, ANGOLA
SITE AREA	500,000m ²
BUILDING SIZE	B1 / F3
ARCHITECT	SPACE GROUP
DESIGN YEAR	2007~2009

DESIGN SUMMARY

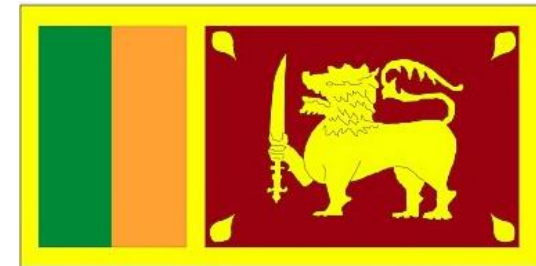
- SCOPE
- ① PILE FOUNDATION DESIGN
 - ② TEMPORARY EARTH RETAINING WALL & LATERAL SUPPORT DESIGN
 - ③ CIVIL WORKS DESIGN

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS



SRI-LANKA





THE DAWSON GRAND RESIDENCIES PROJECT

PROJECT SUMMARY

PROGRAM	PODIUM-PARKING TOWER-RESIDENCE & STUDIO
LOCATION	COLOMBO, SRI-LANKA
SITE AREA	5,546m ²
BUILDING SIZE	F42 (TOWER A) B1 / F38 (TOWER B)
ARCHITECT	SPACE GROUP
DESIGN YEAR	2006~2007

DESIGN SUMMARY

SCOPE	① PILE FOUNDATION DESIGN ② TEMPORARY EARTH RETAINING WALL & LATERAL SUPPORT DESIGN ③ CIVIL WORKS DESIGN
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DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS



WATERFRONT INTEGRATED RESORT PROJECT

PROJECT SUMMARY

PROGRAM	HOTEL, APARTMENT RETAIL, OFFICE & CAR PARKS
LOCATION	COLOMBO, SRI-LANKA
SITE AREA	422,000m ²
BUILDING SIZE	B1~B3 / F9~F47
ARCHITECT	BALMOND STUDIO
DESIGN YEAR	2012~2014

DESIGN SUMMARY

SCOPE ① TEMPORARY EARTH RETAINING WALL & LATERAL SUPPORT DESIGN

DESIGN PROGRESS STAGE

① CONSTRUCTION DOCUMENTS

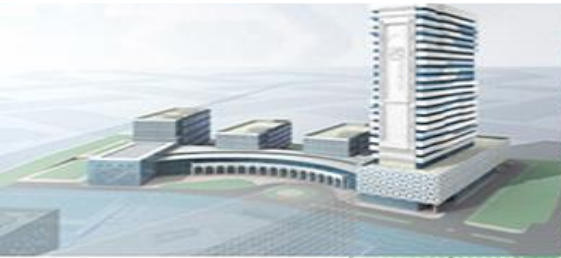
ADDITIONAL WORKS AFTER DESIGN

① CONSULTING
② MEASUREMENT



ALGERIA





C.P.E & I.A.P PROJECT

PROJECT SUMMARY

PROGRAM	EDUCATION FACILITY ACCOMMODATION AND PHYSICAL EXERCISE FACILITY
LOCATION	ORAN, ALGERIA
SITE AREA	40,171m ²
BUILDING SIZE	B1 / F11 (C.P.E) B1 / F21 (I.A.P)
ARCHITECT	SPACE GROUP
DESIGN YEAR	2006

DESIGN SUMMARY

SCOPE ① CIVIL WORKS DESIGN

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT



KAZAKHSTAN





EXPRESS RESIDENTIAL COMPLEX PROJECT

PROJECT SUMMARY

PROGRAM	RESIDENCE, KINDERGARTEN ,COMMERCIAL CENTER
LOCATION	ALMATY, KAZAKHSTAN
SITE AREA	45,280m ²
BUILDING SIZE	B2 / F16
ARCHITECT	SPACE GROUP
DESIGN YEAR	2006~2008

DESIGN SUMMARY

- SCOPE ① TEMPORARY EARTH RETAINING WALL
& LATERAL SUPPORT DESIGN
② CIVIL WORKS DESIGN

EXCAVATION DEPTH 10.0~18.7m

EXCAVATION AREA 42,998m²

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
② DESIGN DEVELOPMENT

MEGA RESIDENCE PROJECT

PROJECT SUMMARY

PROGRAM	RESIDENCE, KINDERGARTEN ,COMMERCIAL CENTER
LOCATION	ALMATY, KAZAKHSTAN
SITE AREA	330,633m ²
BUILDING SIZE	B2 / F18
ARCHITECT	SPACE GROUP
DESIGN YEAR	2007~2008

DESIGN SUMMARY

SCOPE	① TEMPORARY EARTH RETAINING WALL & LATERAL SUPPORT DESIGN ② CIVIL WORKS DESIGN
EXCAVATION DEPTH	3.1~17.8m
EXCAVATION AREA	245,852m ²

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT





AZERBAIJAN



BAKU HOUSING COMPLEX (SKY PARK) PROJECT

PROJECT SUMMARY

PROGRAM	MIXED USE TYPE (OFFICE/APARTMENT/RETAIL)
LOCATION	BAKU, AZERBAIJAN
SITE AREA	40,000m ²
BUILDING SIZE	B3 / F55
ARCHITECT	INI ARCHITECTS
DESIGN YEAR	2008

DESIGN SUMMARY

SCOPE ① CIVIL WORKS DESIGN

DESIGN PROGRESS STAGE

- ① DESIGN DEVELOPMENT
- ② B.P(BUILDING PERMISSION
- ③ CONSTRUCTION DOCUMENTS





VIETNAM





HANOI CITY COMPLEX PROJECT

PROJECT SUMMARY

PROGRAM	MIXED USE TYPE (OFFICE/RESIDENCE/RETAIL ETC.)
LOCATION	HANOI, VIETNAM
SITE AREA	14,095m ²
BUILDING SIZE	B5 / F65
ARCHITECT	DOUL INTERNATIONAL, LTD.
DESIGN YEAR	2006~2008

DESIGN SUMMARY

- SCOPE**
- ① PILE FOUNDATION DESIGN
 - ② TEMPORARY EARTH RETAINING WALL & LATERAL SUPPORT DESIGN
 - ③ CIVIL WORKS DESIGN

EXCAVATION DEPTH 19.46~23.56m

EXCAVATION AREA 13,249m²

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS



HABICO TOWER PROJECT

PROJECT SUMMARY

PROGRAM	MIXED USE TYPE (OFFICE/RESIDENCE/RETAIL)
LOCATION	HANOI, VIETNAM
SITE AREA	8,090m ²
BUILDING SIZE	B4 / F36
ARCHITECT	DOUL INTERNATIONAL, LTD.
DESIGN YEAR	2008~2009

DESIGN SUMMARY

SCOPE	① PILE FOUNDATION DESIGN ② TEMPORARY EARTH RETAINING WALL & LATERAL SUPPORT DESIGN ③ CIVIL WORKS DESIGN
EXCAVATION DEPTH	14.80~18.30m
EXCAVATION AREA	7,806m ²

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS

ADDITIONAL WORKS AFTER DESIGN

- ① CONSULTING



NORTH AN-KHANH NEW CITY PROJECT 1st PHASE

PROJECT SUMMARY

PROGRAM	VILLA, APARTMENT, MIXED-USE, KINDERGARTEN ELEMENTARY SCHOOL
LOCATION	HANOI, VIETNAM
SITE AREA	345,384m ²
BUILDING SIZE	B1 / F23
ARCHITECT	DONG-IL ARCHITECTS
DESIGN YEAR	2008~2011

DESIGN SUMMARY

- SCOPE** ① PILE FOUNDATION DESIGN
② EXCAVATION DESIGN

EXCAVATION DEPTH 5.0~8.0m

EXCAVATION AREA 80,068m²

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
② DESIGN DEVELOPMENT
③ CONSTRUCTION DOCUMENTS





BIDV DIAMOND TOWER PROJECT

PROJECT SUMMARY

PROGRAM	OFFICE
LOCATION	HANOI, VIETNAM
SITE AREA	3,344m ²
BUILDING SIZE	B4 / F30
ARCHITECT	DOUL INTERNATIONAL, LTD
DESIGN YEAR	2009~2012

DESIGN SUMMARY

- SCOPE**
- ① PILE FOUNDATION DESIGN
 - ② TEMPORARY EARTH RETAINING WALL & LATERAL SUPPORT DESIGN
 - ③ CIVIL WORKS DESIGN

EXCAVATION DEPTH 20.5~22.6m

EXCAVATION AREA 3,065m²

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS



MYANMAR





ASIA ROYAL HOSPITAL AR3 PROJECT

PROJECT SUMMARY

PROGRAM	MEDICAL FACILITY
LOCATION	YANGON, MYANMAR
SITE AREA	2,225m ²
BUILDING SIZE	B1 / F11
ARCHITECT	SAMOO ARCHITECTS & ENGINEER
DESIGN YEAR	2014~2015

DESIGN SUMMARY

SCOPE	① PILE FOUNDATION DESIGN ② TEMPORARY EARTH RETAINING WALL & LATERAL SUPPORT DESIGN ③ CIVIL WORKS DESIGN
EXCAVATION DEPTH	1.2~6.0m
EXCAVATION AREA	1,660m ²

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS



QATAR





EMBASSY OF THE REPUBLIC OF KOREA

PROJECT SUMMARY

PROGRAM	OFFICE
LOCATION	DOHA, QATAR
SITE AREA	5,150m ²
BUILDING SIZE	B1 / F2
ARCHITECT	SAMOO ARCHITECTS & ENGINEERS
DESIGN YEAR	2013~2014

DESIGN SUMMARY

- SCOPE** ① TEMPORARY EARTH RETAINING WALL & LATERAL SUPPORT DESIGN
② CIVIL WORKS DESIGN

EXCAVATION DEPTH 1.47~4.46m

EXCAVATION AREA 3,165m²

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS



SAUDI ARABIA





THE KING ABDULLAH MEDICAL CITY PROJECT

PROJECT SUMMARY

PROGRAM	MEDICAL FACILITY
LOCATION	MAKKAH, SAUDI ARABIA
SITE AREA	145,000m ²
BUILDING SIZE	B1 / F11
ARCHITECT	DIYAR
DESIGN YEAR	2013

DESIGN SUMMARY

SCOPE ① EXCAVATION DESIGN
② CIVIL WORKS DESIGN

EXCAVATION DEPTH 0.2~8.3m
EXCAVATION AREA 58,000m²

DESIGN PROGRESS STAGE

① TENDER SUPPORT



SIERRA LEONE





FREETOWN CITY ADMINISTRATIVE COMPLEX PROJECT

PROJECT SUMMARY

PROGRAM	OFFICE FACILITY
LOCATION	FREETOWN, SIERRA LEONE
SITE AREA	1,037m ²
BUILDING SIZE	B1 / F15
ARCHITECT	SAMOO ARCHITECTS & ENGINEERS
DESIGN YEAR	2014

DESIGN SUMMARY

- SCOPE**
- ① PILE FOUNDATION DESIGN
 - ② TEMPORARY EARTH RETAINING WALL & LATERAL SUPPORT DESIGN
 - ③ CIVIL WORKS DESIGN

EXCAVATION DEPTH 14.4~17.5m

EXCAVATION AREA 1,000m²

DESIGN PROGRESS STAGE

- ① SCHEMATIC DESIGN
- ② DESIGN DEVELOPMENT
- ③ CONSTRUCTION DOCUMENTS



FIELD MEASUREMENT



MEASURING EQUIPMENTS

MEASURING EQUIPMENT RETENTION

MEASURING EQUIPMENTS



Inclinometer Casing



Casagrand Tip



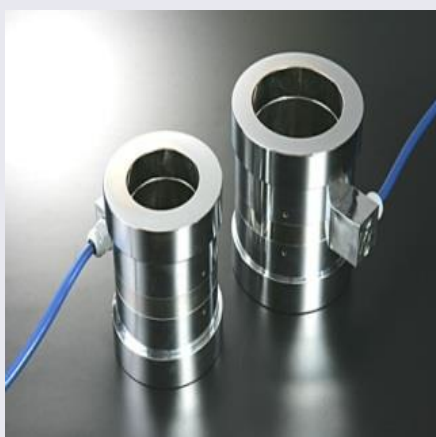
Tilt Plates



Transit Target



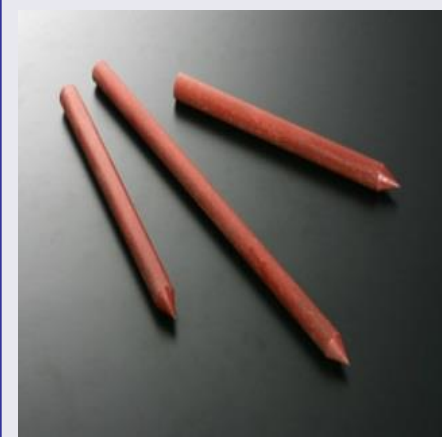
Strain gauge



Load cell



Crack gauge



Settlement pin

MEASURING EQUIPMENTS

MEASURING EQUIPMENT RETENTION

MEASURING EQUIPMENTS



Inclinometer



Water level meter



Tiltmeter



Total Station



V.W Inclinometer (S/G, L/C)



Auto level



vernier calipers



Tape measure

MEASURING EQUIPMENTS

MEASURING EQUIPMENT RETENTION

MEASURING EQUIPMENT RETENTION

NAME OF EQUIPMENT	STANDARD	UNIT	QUANTITY	REMARK
INCLINOMETER		SET	8	Measurement
- PROBE		EA	8	of the horizontal displacement
- CABLE(50M)	LOGGING	EA	8	for excavation back side
- INDICATOR	LOGGING	EA	4	
- DATAMATE		EA	4	
- CHARGE		EA	5	
WATER-LEVEL METER		EA	5	Change measurement of the underground water level
LORD CELL		SET	2	Reaction force measurement
- INDICATOR	V.W.TYPE	EA	2	of ground anchor
- JUMP CABLE		EA	2	
- CHARGE		EA	2	
STRAIN GAUGE		SET	8	Measurement
- INDICATOR		EA	8	of strut deformation
- JUMP CABLE		EA	8	
- CHARGE		EA	8	
TILTMETER		SET	3	Settlement measurement
- SENSOR		EA	3	of adjacent building
- INDICATOR	DIGITILT09	EA	3	
- JUMP CABLE		EA	3	
- CHARGE		EA	3	

MEASURING EQUIPMENTS

MEASURING EQUIPMENT RETENTION

MEASURING EQUIPMENT RETENTION

NAME OF EQUIPMENT	STANDARD	UNIT	QUANTITY	REMARK
V.W.TYPE		SET	3	Measurement of strut deformation
- READOUT			3	
- INDICATOR		EA	3	
- JUMP CABLE		EA	3	
GRACK GAUGE		SET	2	Size measurement of crack
- DEMEC GAUGE		EA	2	
- REFERENCE BAR		EA	2	
DATA TAKER		SET	3	Automatic measurement
- DATA LOGGER		EA	3	
- RS232 CABLE		EA	3	
- MODEM	DC2422	EA	2	
- CHARGE		EA	2	
SETTLEMENT GAUGE		SET	7	
- INDICATOR		EA	7	
SOIL NAIL PULLER				
- DIAL GAUGE		EA	3	
- MAGNETIC BASE		EA	1	
- PULLER		EA	1	
NOISE MEASURING APPARATUS		SET	2	
VIBRATION MEASURING APPARATUS		SET	2	